

BiHoFa – Development of new high-performance fibre composites from renewable raw materials and the necessary manufacturing technologies

Problem / Motivation

- Utilisation of the domestic and renewable raw material hemp bast for high-performance fibre composites
- Technology for processing peeled green hemp bast strips for high-performance fibre composites not available
 - ➔ Technology development for modifying the compact structure of the hemp bast segments so that optimal infiltration of the bast fibres with thermosetting matrices is achieved

Solution

- Development of a combination device for the mechanical partial breakdown of hemp bast strips
- Investigations into further improving fibre-matrix adhesion through plasma treatment
- Processing of the prepared hemp bast segments into textile surfaces
- Consolidation of semi-finished products with thermosetting matrices using various methods

Project Launch

07/2025



Peeled bast segments



Fibrillated bast segments



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